

LIVESTOCK EXCLUSION WITH RIPARIAN BUFFERS FOR TMDL IMPLEMENTATION

DCR Specifications for No. LE-1T

This document specifies terms and conditions for the Virginia Agricultural BMP Cost Share Program's TMDL stream exclusion with riparian buffer best management practice that are applicable to all contracts entered into with respect to that practice.

A. Purpose and Description

A structural and/or management practice that will enhance or protect access to surface waters to reduce runoff of sediment and nutrients from existing pastureland within identified TMDL Implementation Areas only and reduce NPS pollution associated with grazing livestock.

To provide alternative livestock watering systems and fencing that will improve water quality by eliminating direct access to surface waters, establishing riparian buffers, and by improving pasture management by establishing rotational grazing to control erosion. When cost-share funds for establishing rotational grazing are provided, participants must develop and implement a rotational grazing plan. Stream exclusion fencing is a required component of this practice.

B. Policies

1. The majority of the water quality improvement achieved by implementing this practice is associated with excluding livestock from surface waters and establishing riparian buffers. The least cost alternative that best resolves the resource concern must be utilized.
2. A written management plan, and operations and maintenance plan including a rotational schedule when more than one grazing unit is planned must be prepared and followed for all grazing units contained in the system in accordance with NRCS FOTG. Factors to be addressed must include water sources, environmental impacts, fencing needs, wetlands, minimum cover and grazing heights. Additional concerns addressed should include soil fertility, and system maintenance, access lanes, carrying capacity of the land and paddock rotational grazing schedules.
3. To supply water, cost-sharing and tax credit are authorized for:
 - i. Construction or deepening of wells if it is the only technically feasible alternative for a water source.
 - ii. Development of springs or seeps, including fencing of the area, where needed, to protect the development from pollution by livestock.
 - iii. Construction or repair of dugouts, dams, pits, or ponds (if the only technically feasible alternative for water source), including fencing of the area, where needed, to protect the development from pollution by livestock.

- iv. Installing pipelines, storage facilities, cisterns, troughs, and artificial watersheds.
- v. A water supply system can be a portable system to meet the management requirements necessary for systems operation rather than a large number of permanent water facilities.
- vi. Wells must be provided with pumping equipment (except for artesian wells) and adequate facilities. Cost sharing is authorized in connection with wells for pipe installed in the well (including the casing), pumps, pumping equipment, and well houses. Cost-share is not authorized for dry wells.
- vii. Pumps and equipment associated with a portable and permanent watering systems. Pumps may operate on purchased electrical current or alternative energy sources such as solar, battery, mechanical or hydraulic energy. The selected pump and associated equipment should be the most cost effective for the specific site and application. The replacement costs of pumps and pumping equipment components which fail to function properly during the lifespan of the practice are considered maintenance expenses and are the responsibility of the participant.
- viii. Watering facilities that distribute grazing to improve water quality when an existing livestock exclusion of an adjacent stream or sensitive feature fails to protect water quality.

4. To establish pasture management, cost-sharing and tax credit are authorized for:

- i. Fencing, for grazing distribution and to restrict stream access in connection with newly developed watering facilities. The stream exclusion fence must be placed a minimum of 35 feet away from the top of the stream bank, except as designed in areas immediately adjacent to livestock crossings and controlled hardened accesses.
- ii. Locations where there is adequate natural or planted vegetation between the fence and the stream to serve as an effective filter strip to improve water quality.
- iii. Intensive rotational grazing systems may be installed where judged appropriate and feasible by the local technical authority. Consideration must be given, in such cases, to the additional management requirements of such systems.
- iv. Interior fencing or intensive rotational grazing systems that distribute grazing to improve water quality when the existing livestock exclusion of an adjacent stream or sensitive feature fails to protect water quality.
- v. Stream crossings for grazing distribution, as long as the crossing restricts access to the stream.

- vi. Fence chargers used to electrify permanent or temporary fencing.
5. Portable or temporary system components (fencing, etc.) cannot be utilized in other areas or moved from fields utilized in the system plan. The replacement costs of portable components which fail to function properly during the lifespan of the practice are considered maintenance expenses and are the responsibility of the participant.
 6. No cost sharing and tax credit are authorized under the practice for any installation that is:
 - i. PRIMARILY for recreation, wildlife, dry lot feeding, barn lots, or barns.
 - ii. To make it possible to graze crop residues, field borders, or temporary or supplemental pasture crops.
 - iii. For boundary fencing or water supply systems used to establish new pastures not currently in use.
 - iv. For the purpose of providing water for the farm or ranch headquarters.
 7. The system shall be maintained for a minimum of 10 years following the final calendar year of installation. By accepting payment for this practice the recipient agrees to maintain the practice for the specified life. This practice is subject to spot check by the District throughout the life of the practice and failure to comply may result in forfeiture of funds.
 8. State cost-share and tax credit on this practice are limited to pastureland that borders a live stream or Chesapeake Bay Preservation Act Resource Protection Area as defined by local ordinance. Exception to this may be granted only in cases of severe environmental degradation occurring in and around features such as seeps, ponds, wetlands, sinkholes, etc.
 9. Wells constructed under this practice must meet appropriate state and local ordinances and permit requirements for wells supplying water to livestock as a minimum.
 10. A portable water supply system is any system or component (i.e. trough, pipe, etc.) that is (i) commercially available or farmer constructed, (ii) large enough to provide a timely and sufficient volume of water for the livestock to be contained in a specific area for which the system is designed, (iii) capable of being maintained in a stable position and protected from any damage while the system or component is in use, and (iv) capable of being moved in a timely manner from one location to another within the acreage for which the system is designed.
 11. The primary water use of the components listed in subsection 2 above which were installed with state cost-share assistance must be for the purpose of providing water for livestock; however, incidental use may be permitted but is subject to review and approval of the SWCD Board of Directors. Cost-share assistance is not permitted for any electrical, structural, or plumbing supplies, including pipe, or associated construction costs for developing any incidental use. When an incidental use is anticipated in advance of BMP implementation, the District Board should consider the applicant's intent before approving the request. When a need for incidental use

arises following practice implementation approval is subject to a decision by the SWCD Board of Directors. Failure to follow this guidance may result in a re-payment of some portion of the cost share funds provided.

C. Specifications

1. Soil loss rates must be computed for all applications for use in establishing priority considerations.
2. Flash grazing (allowing livestock to graze the excluded riparian area) is not allowed as a management alternative during the lifespan of this practice.
3. This practice is subject to NRCS Standards 528 Prescribed Grazing, 382 Fence, 390 Riparian Herbaceous Cover, 512 Pasture and Hay Planting, 561 Heavy Use Area Protection, 574 Spring Development, 614 Watering Facility, 516 Pipeline, 472 Access Control, 642 Water Well, 580 Stream bank and Shoreline Protection, and 378 Pond (water supply only).
4. The life span of this practice is ten years starting on January 1 of the calendar year following the issuance of the final cost-share payment.

D. Rate

1. A cost-share rate based on 85% of the lesser of the estimated or actual cost of all eligible components has been established. Cost-share may be from state funds or a combination of state and other sources.
2. The Tax Credit rate is 25% of the total eligible cost not to exceed \$17,500.00. If a cooperator receives Cost-Share, only the percent of the total cost of the project that the cooperator contributed is used to determine the Tax Credit.

E. Technical Responsibility

Technical responsibility is assigned to NRCS due to the standards listed above. Any individual with appropriate NRCS job approval authority can allow authorization. All component practices used in the installation of this BMP must be entered into the NRCS reporting system and are subject to spot check procedures and any other quality control measures.

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